Our Ref.: A7909

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60. The method as claimed in claim 57, further comprising: completing said winding of said buffer tube onto said spool; and winding said buffer tube onto a second spool while removing said pad from said winding.

A method of winding a buffer tube having at least one optical fiber contained 61. therein on a spool comprising:

winding said buffer tube onto a first spool while inserting a pad between successive layers of said buffer tube and providing a draw tension on said buffer tube; and

winding said buffer tube onto a second spool from said first spool while removing said pad from said windings of said buffer tube.

- 62. The method as claimed in claim 61, further comprising placing a buffer pad on said spool prior to winding said buffer tube.
- The method as claimed in claim 62, wherein said buffer pad has a Young's 63. modulus less than that of said buffer tube.
- 64. The method as claimed in claim 61, wherein said pad has a Young's modulus less than that of said buffer tube.

The method as claimed in claim 61, wherein a diameter of said first spool at a 65. point where said buffer tube is winding on said first spool is larger than 100 mm.

- The method as claimed in claim 61, wherein a length of said buffer tube is less 66. than 10 km.
- The method as claimed in claim 61, further comprising varying said draw 67. tension while said buffer tube is winding onto said first spool.
- The method as claimed in claim 67, wherein said draw tension is decreased 68. while said buffer tube is winding onto said spool.
- The method as claimed in claim 67, wherein said draw tension is varied 69. according to a monotonical function.
- The method as claimed in claim 61, further comprising varying an angular 70. speed of said first spool while said buffer tube is winding onto said first spool.
- The method as claimed in claim 70, wherein said angular speed is increased 71. while said buffer tube is winding onto said first spool.
- The method as claimed in claim 70, wherein said angular speed is varied 72. according to a monotonical function.

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tension to said buffer tube;

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73. A fiber optic buffer tube having at least one optical fiber therein made in accordance with the method claimed in claim 34.

- 74. A fiber optic buffer tube having at least one optical fiber therein made in accordance with the method claimed in claim 47.
- 75. A fiber optic buffer tube having at least one optical fiber therein made in accordance with the method claimed in claim 61.
- 76. A method for winding a fiber optic buffer tube onto a spool, comprising:

 placing a buffer pad on an outer surface of a core of said spool;

 winding said buffer tube onto said buffer pad while applying a first draw

functionally changing said first draw tension as said buffer tube is wound onto said spool and said buffer pad;

measuring EFL of said buffer tube and determining an error in said EFL; and re-spooling said buffer tube onto a second spool to correct said EFL error.

77. The method as claimed in claim 76, further comprising heating said buffer tube during said re-spooling.